

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/557,351A  
Source: 1FW0  
Date Processed by STIC: 12/12/06

# ***ENTERED***



IFWO

## RAW SEQUENCE LISTING

DATE: 12/18/2006

PATENT APPLICATION: US/10/557,351A

TIME: 10:46:00

Input Set : N:\Cr4\12122006\J557351.raw

Output Set: N:\CRF4\12182006\J557351A.raw

```

1 <110> APPLICANT: Takada Pharmaceutical Company Limited
2 <120> TITLE OF INVENTION: Antibody and its use
3 <130> FILE REFERENCE: G05-0070
4 <140> CURRENT APPLICATION NUMBER: US/10/557,351A
5 <141> CURRENT FILING DATE: 2005-11-18
6 <150> PRIOR APPLICATION NUMBER: JP2003-151577
7 <151> PRIOR FILING DATE: 2003-05-28
8 <160> NUMBER OF SEQ ID NOS: 20
10 <210> SEQ ID NO: 1
11 <211> LENGTH: 14
12 <212> TYPE: PRT
13 <213> ORGANISM: Artificial Sequence
14 <220> FEATURE:
15 <223> OTHER INFORMATION: immunogen
16 <400> SEQUENCE: 1
17     Trp Tyr Lys His Val Ala Ser Pro Arg Tyr His Thr Val Cys
18           5                               10
20 <210> SEQ ID NO: 2
21 <211> LENGTH: 14
22 <212> TYPE: PRT
23 <213> ORGANISM: Artificial Sequence
24 <220> FEATURE:
25 <223> OTHER INFORMATION: immunogen
26 <400> SEQUENCE: 2
27     Cys His Thr Val Gly Arg Ala Ala Gly Leu Leu Met Gly Leu
28           5                               10
30 <210> SEQ ID NO: 3
31 <211> LENGTH: 16
32 <212> TYPE: PRT
33 <213> ORGANISM: Artificial Sequence
34 <220> FEATURE:
35 <223> OTHER INFORMATION: immunogen
36 <400> SEQUENCE: 3
37     Cys Ala Ser Gly Leu Leu Met Gly Leu Arg Arg Ser Pro Tyr Leu Trp
38           5                               10                               15
40 <210> SEQ ID NO: 4
41 <211> LENGTH: 23
42 <212> TYPE: PRT
43 <213> ORGANISM: Homo sapiens
44 <400> SEQUENCE: 4
45     Trp Tyr Lys His Val Ala Ser Pro Arg Tyr His Thr Val Gly Arg Ala
46     1           5                               10                               15
47     Ala Gly Leu Leu Met Gly Leu

```

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Input Set : N:\Crf4\12122006\J557351.raw

Output Set: N:\CRF4\12182006\J557351A.raw

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48          20
50 <210> SEQ ID NO: 5
51 <211> LENGTH: 30
52 <212> TYPE: PRT
53 <213> ORGANISM: Homo sapiens
54 <400> SEQUENCE: 5
55      Trp Tyr Lys His Val Ala Ser Pro Arg Tyr His Thr Val Gly Arg Ala
56      1          5          10          15
57      Ala Gly Leu Leu Met Gly Leu Arg Arg Ser Pro Tyr Leu Trp
58          20          25          30
60 <210> SEQ ID NO: 6
61 <211> LENGTH: 23
62 <212> TYPE: PRT
63 <213> ORGANISM: Rattus norvegicus
64 <400> SEQUENCE: 6
65      Trp Tyr Lys His Val Ala Ser Pro Arg Tyr His Thr Val Gly Arg Ala
66      1          5          10          15
67      Ser Gly Leu Leu Met Gly Leu
68          20
70 <210> SEQ ID NO: 7
71 <211> LENGTH: 30
72 <212> TYPE: PRT
73 <213> ORGANISM: Rattus norvegicus
74 <400> SEQUENCE: 7
75      Trp Tyr Lys His Val Ala Ser Pro Arg Tyr His Thr Val Gly Arg Ala
76      1          5          10          15
77      Ser Gly Leu Leu Met Gly Leu Arg Arg Ser Pro Tyr Leu Trp
78          20          25          30
80 <210> SEQ ID NO: 8
81 <211> LENGTH: 23
82 <212> TYPE: PRT
83 <213> ORGANISM: Mus musculus
84 <400> SEQUENCE: 8
85      Trp Tyr Lys His Val Ala Ser Pro Arg Tyr His Thr Val Gly Arg Ala
86      1          5          10          15
87      Ser Gly Leu Leu Met Gly Leu
88          20
90 <210> SEQ ID NO: 9
91 <211> LENGTH: 30
92 <212> TYPE: PRT
93 <213> ORGANISM: Mus musculus
94 <400> SEQUENCE: 9
95      Trp Tyr Lys His Val Ala Ser Pro Arg Tyr His Thr Val Gly Arg Ala
96      1          5          10          15
97      Ser Gly Leu Leu Met Gly Leu Arg Arg Ser Pro Tyr Gln Trp
98          20          25          30
100 <210> SEQ ID NO: 10
101 <211> LENGTH: 23
102 <212> TYPE: PRT

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Input Set : N:\Crf4\12122006\J557351.raw

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103 <213> ORGANISM: Sus scrofa
104 <400> SEQUENCE: 10
105      Trp Tyr Lys His Thr Ala Ser Pro Arg Tyr His Thr Val Gly Arg Ala
106      1              5              10              15
107      Ala Gly Leu Leu Met Gly Leu
108              20
110 <210> SEQ ID NO: 11
111 <211> LENGTH: 30
112 <212> TYPE: PRT
113 <213> ORGANISM: Sus scrofa
114 <400> SEQUENCE: 11
115      Trp Tyr Lys His Thr Ala Ser Pro Arg Tyr His Thr Val Gly Arg Ala
116      1              5              10              15
117      Ala Gly Leu Leu Met Gly Leu Arg Arg Ser Pro Tyr Met Trp
118              20              25              30
120 <210> SEQ ID NO: 12
121 <211> LENGTH: 14
122 <212> TYPE: PRT
123 <213> ORGANISM: Artificial Sequence
124 <220> FEATURE:
125 <223> OTHER INFORMATION: Biotin-labeled peptide
126 <220> FEATURE:
127 <221> NAME/KEY: MOD_RES
128 <222> LOCATION: 14
129 <223> OTHER INFORMATION: Xaa means biotin-labeled Cys modified with Biotin (Long Arm)
Maleimide
130      (Vector Laboratories).
131 <400> SEQUENCE: 12
W--> 132      Trp Tyr Lys His Val Ala Ser Pro Arg Tyr His Thr Val Xaa
133              5              10
135 <210> SEQ ID NO: 13
136 <211> LENGTH: 14
137 <212> TYPE: PRT
138 <213> ORGANISM: Artificial Sequence
139 <220> FEATURE:
140 <223> OTHER INFORMATION: Biotin-labeled peptide
141 <220> FEATURE:
142 <221> NAME/KEY: MOD_RES
143 <222> LOCATION: 1
144 <223> OTHER INFORMATION: Xaa means biotin-labeled Cys modified with Biotin (Long Arm)
Maleimide
145      (Vector Laboratories).
146 <400> SEQUENCE: 13
W--> 147      Xaa His Thr Val Gly Arg Ala Ala Gly Leu Leu Met Gly Leu
148              5              10
150 <210> SEQ ID NO: 14
151 <211> LENGTH: 16
152 <212> TYPE: PRT
153 <213> ORGANISM: Artificial Sequence
154 <220> FEATURE:
155 <223> OTHER INFORMATION: Biotin-labeled peptide

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## RAW SEQUENCE LISTING

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Input Set : N:\Crf4\12122006\J557351.raw

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156 &lt;220&gt; FEATURE:

157 &lt;221&gt; NAME/KEY: MOD\_RES

158 &lt;222&gt; LOCATION: 1

159 &lt;223&gt; OTHER INFORMATION: Xaa means biotin-labeled Cys modified with Biotin (Long Arm)

Maleimide

160 (Vector Laboratories).

161 &lt;400&gt; SEQUENCE: 14

W--&gt; 162 Xaa Ala Ser Gly Leu Leu Met Gly Leu Arg Arg Ser Pro Tyr Leu Trp

163 5 10 15

165 &lt;210&gt; SEQ ID NO: 15

166 &lt;211&gt; LENGTH: 328

167 &lt;212&gt; TYPE: PRT

168 &lt;213&gt; ORGANISM: Homo sapiens

169 &lt;400&gt; SEQUENCE: 15

170 Met Asp Asn Ala Ser Phe Ser Glu Pro Trp Pro Ala Asn Ala Ser Gly

171 1 5 10 15

172 Pro Asp Pro Ala Leu Ser Cys Ser Asn Ala Ser Thr Leu Ala Pro Leu

173 20 25 30

174 Pro Ala Pro Leu Ala Val Ala Val Pro Val Val Tyr Ala Val Ile Cys

175 35 40 45

176 Ala Val Gly Leu Ala Gly Asn Ser Ala Val Leu Tyr Val Leu Leu Arg

177 50 55 60

178 Ala Pro Arg Met Lys Thr Val Thr Asn Leu Phe Ile Leu Asn Leu Ala

179 65 70 75 80

180 Ile Ala Asp Glu Leu Phe Thr Leu Val Leu Pro Ile Asn Ile Ala Asp

181 85 90 95

182 Phe Leu Leu Arg Gln Trp Pro Phe Gly Glu Leu Met Cys Lys Leu Ile

183 100 105 110

184 Val Ala Ile Asp Gln Tyr Asn Thr Phe Ser Ser Leu Tyr Phe Leu Thr

185 115 120 125

186 Val Met Ser Ala Asp Arg Tyr Leu Val Val Leu Ala Thr Ala Glu Ser

187 130 135 140

188 Arg Arg Val Ala Gly Arg Thr Tyr Ser Ala Ala Arg Ala Val Ser Leu

189 145 150 155 160

190 Ala Val Trp Gly Ile Val Thr Leu Val Val Leu Pro Phe Ala Val Phe

191 165 170 175

192 Ala Arg Leu Asp Asp Glu Gln Gly Arg Arg Gln Cys Val Leu Val Phe

193 180 185 190

194 Pro Gln Pro Glu Ala Phe Trp Trp Arg Ala Ser Arg Leu Tyr Thr Leu

195 195 200 205

196 Val Leu Gly Phe Ala Ile Pro Val Ser Thr Ile Cys Val Leu Tyr Thr

197 210 215 220

198 Thr Leu Leu Cys Arg Leu His Ala Met Arg Leu Asp Ser His Ala Lys

199 225 230 235 240

200 Ala Leu Glu Arg Ala Lys Lys Arg Val Thr Phe Leu Val Val Ala Ile

201 245 250 255

202 Leu Ala Val Cys Leu Leu Cys Trp Thr Pro Tyr His Leu Ser Thr Val

203 260 265 270

204 Val Ala Leu Thr Thr Asp Leu Pro Gln Thr Pro Leu Val Ile Ala Ile

205 275 280 285

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Input Set : N:\Crf4\12122006\J557351.raw

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206      Ser Tyr Phe Ile Thr Ser Leu Ser Tyr Ala Asn Ser Cys Leu Asn Pro
207      290                                295                                300
208      Phe Leu Tyr Ala Phe Leu Asp Ala Ser Phe Arg Arg Asn Leu Arg Gln
209      305                                310                                315                                320
210      Leu Ile Thr Cys Arg Ala Ala Ala
211      325
213 <210> SEQ ID NO: 16
214 <211> LENGTH: 984
215 <212> TYPE: DNA
216 <213> ORGANISM: Homo sapiens
217 <400> SEQUENCE: 16
218      atggacaacg cctcggttctc ggagccctgg cccgccaacg catcgggccc ggaccgcggcg      60
219      ctgagctgct ccaacgcgctc gactctggcg ccgctgccgg cgccgctggc ggtggctgta      120
220      ccagttgtct acgcggtgat ctgcgccgtg ggtctggcgg gcaactccgc cgtgctgtac      180
221      gtgttgctgc gggcgccccg catgaagacc gtcaccaacc tgttcattct caacctggcc      240
222      atcgccgacg agctcttcac gctgggtgctg cccatcaaca tcgccgactt cctgctgcgg      300
223      cagtggccct tcggggagct catgtgcaag ctcatcgtgg ctatcgacca gtacaacacc      360
224      ttctccagcc tctacttcct caccgtcatg agcgccgacc gctacctggg ggtggttgcc      420
225      actgcccagc cgcgcggggt ggccggccgc acctacagcg ccgcgcggcg ggtgagcctg      480
226      gccgtgtggg ggatcgtcac actcgtcgtg ctgcccttcg cagtcttcgc ccggctagac      540
227      gacgagcagg gccggcgcca gtgcgtgcta gtctttccgc agcccagggc cttctggttg      600
228      cgcgcgagcc gcctctacac gctcgtgctg ggcttcgcca tccccgtgtc caccatctgt      660
229      gtcctctata ccacctgct gtgccggctg catgccatgc ggctggacag ccacgccaag      720
230      gccctggagc gcgccaagaa gcgggtgacc ttcctggtgg tggcaatcct ggcggtgtgc      780
231      ctctctgct ggacgccta ccacctgagc accgtggtgg cgctcaccac cgacctcccg      840
232      cagacgccgc tggtcacgc tatctcctac ttcatcacca gcctgagcta cgccaacagc      900
233      tgcctcaacc ccttcctcta cgccttcctg gacgccagct tccgcaggaa cctccgccag      960
234      ctgataactt gccgcgcggc agcc                                984
236 <210> SEQ ID NO: 17
237 <211> LENGTH: 333
238 <212> TYPE: PRT
239 <213> ORGANISM: Homo sapiens
240 <400> SEQUENCE: 17
241      Met Gln Ala Ala Gly His Pro Glu Pro Leu Asp Ser Arg Gly Ser Phe
242      1                                5                                10                                15
243      Ser Leu Pro Thr Met Gly Ala Asn Val Ser Gln Asp Asn Gly Thr Gly
244      20                                25                                30
245      His Asn Ala Thr Phe Ser Glu Pro Leu Pro Phe Leu Tyr Val Leu Leu
246      35                                40                                45
247      Pro Ala Val Tyr Ser Gly Ile Cys Ala Val Gly Leu Thr Gly Asn Thr
248      50                                55                                60
249      Ala Val Ile Leu Val Ile Leu Arg Ala Pro Lys Met Lys Thr Val Thr
250      65                                70                                75                                80
251      Asn Val Phe Ile Leu Asn Leu Ala Val Ala Asp Gly Leu Phe Thr Leu
252      85                                90                                95
253      Val Leu Pro Val Asn Ile Ala Glu His Leu Leu Gln Tyr Trp Pro Phe
254      100                               105                               110
255      Gly Glu Leu Leu Cys Lys Leu Val Leu Ala Val Asp His Tyr Asn Ile
256      115                               120                               125

```

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/557,351A

DATE: 12/18/2006  
TIME: 10:46:01

Input Set : N:\Crf4\12122006\J557351.raw  
Output Set: N:\CRF4\12182006\J557351A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:12; Xaa Pos. 14  
Seq#:13; Xaa Pos. 1  
Seq#:14; Xaa Pos. 1

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:12; Line(s) 129  
Seq#:13; Line(s) 144  
Seq#:14; Line(s) 159

## VERIFICATION SUMMARY

DATE: 12/18/2006

PATENT APPLICATION: US/10/557,351A

TIME: 10:46:01

Input Set : N:\Crf4\12122006\J557351.raw

Output Set: N:\CRF4\12182006\J557351A.raw

L:132 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0

L:147 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0

L:162 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0